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EDITORIAL

HEALTH PROPAGANDA THROUGH RADIO

WE, who are interested in public health, find with disappointment that, among the various topics on which radio talks are being given, no time or mind is devoted for health propaganda. Radio is more for education than for entertainment of the public. In so far as it is educative, it should not wait for any public taste to develop for a particular subject. On the other hand, it should create that taste in a given subject, say, health, for instance. This, we opine, is not only possible, but easier than in the case of other subjects. Disease is so common that we may expect none to be disinterested in health talks. We foresee that, next to international news, health talks will stand first in the radio programme in respect of attraction.

We also think that the government need not incur any expenditure on this account. There are eminent doctors in the Government service and private practice who can

be asked to prepare and give periodical talks on such subjects as prevention and nutrition. Even many a private medical man may be found volunteering to do the job in the interests of the public.

The talks should be periodical and not daily, say, once a week. Anything occurring every day will lose its charm, and is ignored as if never happening.

The talks should be of educative value. Pandits of Ayurveda, etc., may be at times requested to advise the public on health matters.

Naturally, after sometime, the public will send questions to be answered. This is a sign of the growing interest in the subject, and the Government should encourage it by setting up a permanent committee to answer the public doubts on radio health talks. Most conveniently, the speaker himself, to whose talk the questioner refers, may be asked to answer. But,

if the question is of independent character, the Committee will answer it. So, once in a month a date should be announced for answering all the questions received between the previous and the given occasions. This will rouse more and more public interest in health topics. All questions leading to party or communal controversy will be declined to be answered.

subject and keeping it burning is to foment healthy academic controversy over it and to encourage it. It is better to make the public question themselves as to what to do to prevent disease and what to eat and what not to eat, than to allow them uninstructed.

The need for such health propaganda is there more than ever at present. For, with the shortage and

stoppage of many important drugs such as Quinine, etc., owing to the war, people will have to depend more on prevention than on cure. And while the latter requires no education, as there would be a doctor to take care of it, the former is impossible without proper education given before hand. The question, for instance, of what to do to prevent mala-

ria whose season is fast approaching in India, cannot be answered by the lay man without education. Health propaganda is as much essential for the welfare of man as nutrition itself. The best and the cheapest medium of propaganda nowadays is radio. As it is used for helping the war work, so it must be for health propaganda both in the interests of people and the government.



The Visit of General Chiang Kai-Shek to India

General Chiang Kai-Shek, leader of China's four hundred millions, recently held political and economic discussions with the leaders of yet another four hundred Millions inhabiting India.

Such a simple scheme as this should be immediately taken up by the Government. One need not fear that it would lead to confusion in the minds of the public regarding health problems. On the other hand, a certain amount of public thinking will have been set apart for health and it is certainly better than total ignorance of the subject. In fact, the best way of creating interest in a

Injuries to the eye occur at the rate of 1,000 a day and cause an annual loss of \$2,000,000,000, says a report sponsored by the National Society for the Prevention of Blindness.—*Science News Letter*, February 21, 1942.—*Minnesota Medicine*.

AUTO-INFECTION

By

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IN a former article, entitled 'Human Carrier,' it was dealt with how a man carries infection

to another man, by direct contact, or through the medium of air, water and food. In the present issue, we shall see how a man infects himself from some source of infection which starts from his own body. Just as in certain factories of a town articles are manufactured and stored up to be distributed to different parts of the town, in the same way, the germs of many diseases live and grow in certain parts of the body, and from there are set free to search different parts of the body, by means of the blood stream or other channels, where they set up various diseases. The parts of the body where these germs take shelter are called focuses of diseases, from which they travel to other parts to set up disease. As these germs do not come from outside directly but grow from within the body, this sort of infection is called auto or self-infection, and as this self-infection is going on within the body of most people, a general idea of the subject should be in the knowledge of all people. A simple example will make the subject very clear. Suppose a man has got pyorrhœa alveolaris, or pus at the root of his teeth. This pus is very likely to reach his stomach and intestines with his food, and also other parts of the body, through the blood, which supplies the teeth and gums, and thus sets up diarrhœas in the intestines and abscesses and joint troubles in other parts of the body. Similarly, carious teeth may lodge other germs. Enlarged tonsils also may do so. Pharyngitis or chronic sore-throat, otorrhœa, or pus in the ear, coryza or catarrh

of the nose, and many eye diseases also may harbour many germs of diseases, and propagate them to other

parts of the body. For instance, the diseased tonsils may give shelter to tubercular germs, which gradually affect the neighbouring glands of the neck or even the lungs, thus giving rise to what are called tubercular adenitis and pulmonary tuberculosis respectively. They may also shelter the bacillus of the so-called rheumatic fevers. Pus in the ear may set up abscess in the brain and catarrh of the nose, or may set up chronic bronchitis, asthma etc. In this way, if any focus of infection forms in any part of the body or, in other words, if any germ of a disease makes its way into the body and finds shelter there, for some time, it always tries to grow and spread to do some mischief in the long run. All such sources should, therefore, be treated at once, so that they may be cured and made free from infection.

There are other ways, by which also the body is attacked from within although the germs do not take any part in them. These are called auto-intoxication or self poisoning. These poisonous materials are formed within our body from the products of digestion or rather indigestion and from other sources such as urine and stools. It should be borne in mind, that all food or any and every food that we take, is not digested wholly and taken up by the body. The rest is given out with the urine and stools. If we take bad food or food in excess, the body cannot naturally cope with them and various substances are formed out of them in the intestines which the body cannot retain or cope with, and these substances

themselves behave like poisons and give rise to various bad symptoms. Everybody knows that when food is not well digested, diarrhoea, vomiting, headache etc. take place. Even when stools remain for a long time in the bowels as in constipation, they produce many bad effects on the system such as headache and other symptoms, because all waste matters of the food are contained in the stools, and therefore should be cleared out of the body, as soon as they are formed. Various other poisonous matters arise out of the process of wrong digestion if they are not removed from the body with the stools and urine. The urine is the means by which these products are washed out of the body. But if the urine does not function properly these toxic products are retained in the body and produce many bad and even dangerous symptoms, such as the formation of stones in the kidney and appearance of gout in the joints. A kind of sugar called grape-sugar and albumin a substance similar to egg-

white, are formed in the blood, and in the kidney where the urine is formed, when the condition known as diabetes and albuminuria takes place. These diseases do not come from outside but come from within the body as a result of bad digestion, excess of food, and irregularities of the bowel. Food is essential for the body, for its nutrition, strength, and everything, but indiscretion of diet, indulgence in excessive food irregular action of the bowels are all to be avoided as these bring on very bad after effects.

We, therefore, find from what has been described in the above lines that there always remain chances of the body being attacked by some infection or toxin as it may be called from inside our own system, the sources of which have been roughly mentioned. In order to keep the body free from these invasions of diseases one should be his own guard not to allow any such focus to remain in his body, nor should ever indulge in excesses of food and drink.

THE dictionary meaning of the word 'sedative' is: a medicine which allays irritability and irritation, and

SEDATIVES

BY SRI K. VISWANATHAN,

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assuages pain. Medicine is any substance administered in the treatment of disease: a remedial agent. So, a sedative is any remedy to allay irritability and lessen pain.

75 per cent of persons who go to the physician are nervous patients—dissatisfied, tired with worry, anxiety and fear. Disturbed at the slight noise, they get no sleep. Barring a few exceptions, these nervous cases can be treated and often cured by sedatives. The stress and irregularity of business and social life increase this which can be prevented by rallying to aid nature with well-digested

food, well-regulated habits, and well-slept sleep.

Frequent parties, and drinking etc., increase nervousness. Loss of sleep, and intemperance are major causes of mental and physical disease. Nervous insomnia leads to shattered nerves, ordinarily known as "nervous breakdown", which may last for days or even months. Hospital cases prove this.

Alcohol also increases this strain. To relieve this strain on the nerves, nature needs a sedative; but the nervous patient usually resorts to alcohol to drown his troubles. This

drink increases the nervousness, with the result that such a man requires months and years to recover and recoup, or dies as such. "Out of 10 families of habitual drinkers, there were 56 children born. Of these, 25 died in infancy, 6 were idiots, 5 were deformed, 5 had a belated state of development, 5 were epileptics, one was afflicted with St. Vitus's dance, and only 10 were normal." The nerves need a sedative, and it is natural and sensible to drown them in pure water inside and outside.

Before proceeding further, let me say that nerve sedative effects are classified as follows:

1. General sedatives: (a) Pure sedatives. (b) Tonic sedatives.
2. Local sedatives: (a) Relief of pain. (b) Relief of abnormal sensation.

The skin has been called "the keyboard of hydro-therapy". There are three main sets of nerves terminating in the skin. They are: (1) the secretory, (2) the vasomotor, and (3) the temperature nerves. The first govern elimination through the skin. The second nerves govern the activity of the blood vessels, thus controlling a very essential factor in circulation, that which is known as the peripheral heart. These are important in hydro-therapy.

The temperature nerves regulate heat production, and reflexly influence the activity of glands and internal organs.

High pressure of blood, nervous hypertension, auto-intoxication, certain mental disturbances, nervousness and many other disorders are developed secondarily by the accumulative action or sluggishness of these sets of nerves. Their importance in hydrotherapy cannot be over-emphasised. A failure, for example, of the vaso-motor mechanism may cause death; as a matter of fact, many heart failures are due to an extra-burden when the small blood vessels fail to contract and dilate. So stimulation of vasomotor would relieve the

heart. In hydro-therapy, the Nauheim bath is used. It is a bath of cool salt water with chemicals added which charge it with carbon-di-oxide. A person suffering from a weak heart defective and rapid-beating, when immersed into the bath, experiences an astonishing change for the better. This bath powerfully stimulates the vasomotor system which controls the peripheral heart; the capillary circulation is greatly hastened. The heart takes on a slower, stronger and more regularly rhythmic beat as it is relieved of extra work.

Hydrotherapy or the use of water in the treatment of disease is not a



Vapour Bath for the Ailing Feet
A form of Hydrotherapy.

new one. It is mentioned in the Hindu Sastras and many of the *vaidyas* follow it, but the technique to some extent, is different from hydrotherapy as practised in the

West. It presents an interesting field for study and experimental advance. It is also a part of Yoga.

Pain and abnormal sensations require special measures. Pure sedatives need warm or neutral applications. The type of insomnia determines the type of sedatives or sedation. Take the case of a hard-working or over-active individual who worries and is easily excited to a nervous frenzy. He needs a pure sedative such as the neutral continuous bath. This bath may be prolonged till there is relaxation. The temperature varies according to the individual and the season of the year, but is generally given at 95—99° F.

The following should be remembered while giving a neutral bath :

- (1) Position in the tub should be comfortable.
- (2) There should be plenty of water to cover the body, kept at constant temperature.
- (3) The room should be warm and quiet.
- (4) The bed should be ready.
- (5) Water should be cooled a few degrees before getting out, to prevent a feeling of chilliness.

No friction is to be exerted when drying the body as this destroys the sedative effect. With the neutral bath, pack or mild fomentation, there is a soothing, relaxing effect on the nerves. This relieves the congestion in the brain and nerve centres and lowers the body temperature and activity. These are essential for rest and sleep. Hot and cold baths, and sprays or fomentation at bed time produce the desired effects. Sleep and rest are Nature's best remedies for tired nerves.

The psychiatrist uses extensively hydrotherapy as an effective aid to nature in relieving insomnia and restlessness. The after-effects of other sedatives such as drugs and physiological sedatives are decidedly different. The sensibility of the nerves is deadened by drug hypnotics as Bromides or Morphia, the cause of insomnia is not removed, the patient is left drowsy, irritated and very commonly with a headache. The drugs do not produce natural sleep. Their use has a decided tendency to increase nervous tension and irritability. The bromide patient needs every night sleep pills, thus becoming a drug addict no better than the opium or drink addict. Hydrotherapy produces sound and refreshing natural sleep.

“ Nervous irritability and insomnia may also be due to toxic symptoms of an accumulation of waste product in the system. Many of these waste materials dissolve only in an appre-

ciably large amount of water. The work of the kidneys is actually lessened with free water-drinking, because these poisonous waste matter is excreted more readily in the dilute form”.

It may also be due to too much of mental work. A stoppage of mental labour is necessary then. Indigestion, or accumulation of waste materials in the intestines, and chronic constipation may also produce nervousness. Drinking of plenty of cold water helps in relieving congestion of the colon. Laxatives such as gall, senna, rose buds etc. also help. Violent purge aggravates the trouble. A cup of warm milk, or tepid water drunk at bed time also brings on refreshing sleep. Fruits help to soothe the nerves, act as laxatives and give nourishment to the body.

Water is inexpensive, and easily prepared for use ; so it is by far the most accessible therapy. In most homes now-a-days, there is a bath and plenty of water. Water is a God-given means to health. If a bath cannot be stood for some reasons, sponging the body with warm or cold water gives a decided tendency to sleep. A trial is worthwhile by any one who is suffering from nervousness.

Some wonderful remedies are effected by the Malabar vaidyas. They follow hydropathy to a limited extent. But they have different baths of oil such as *Navarakishi*, Dhara, Pizhichil etc.

The Hindu habit of taking a bath in the river or tank fully plunging the body in the water has the object of preventing nervousness.

In neurasthenia and approaching nervous breakdown, sunlight acts as an irritant if used in large doses. In very small doses, sun therapy (if light is filtered through suitable colours) proves beneficial. Here, one has to watch and be careful. In baths, there is no such danger of over dosage.

HYGIENE OF THE MOUTH

WHAT causes teeth to decay?

The principal cause is uncleanliness. A

clean tooth never decays. It is estimated by dentists that 95% of all dental diseases are traced to unhealthy gums.

Those suffering from unhealthy gums would be unconsciously swallowing during sleep poisonous matter exuding therein. One may not be aware that one is suffering from diseased gums. One may test the gums by rubbing the finger on the gums and actually smelling.

The indirect cause of decay, accounting for the other 5% have to do with the general health of the body. For example, protracted illness, lack of outdoor exercise, excessive work or study, anxiety and worry, will so lower the general tone of the system as to make it unable to resist the action of deleterious agents such as the bacteria which cause decay in teeth. If there is bleeding from the gums, or swelling or discharge of matter (pus) or decay of teeth or any other disorder—see a good dentist.

To prevent decay, keep your teeth clean. Thorough chewing of food is the natural cleanser of teeth, as it causes a proper flow of saliva. Eating of fresh fruit after each meal helps to keep the mouth and teeth clean. Children should be taught from a young age the importance of cleaning the mouth and teeth after each meal. After eating of sweets and starchy food, the mouth must be rinsed with water for at least two minutes.

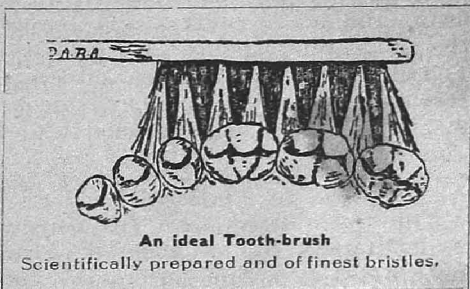
Select first a good dentifrice, preferably one which has a germicidal action, such as a dental cream or preparation that will help to kill the germs which fasten upon teeth and cause decay. If the dentifrice you

TOOTH DECAY IS A RESULT OF UNCLEANLINESS, COMMON AILMENTS OF MOUTH, NOSE, THROAT AND EAR

By DR. W. CLEMENT HUNSZE, L.M.P., (MADRAS), Ceylon.

select has a pleasing, clean taste, so much the better, but be sure it has ingredients which destroy tooth and mouth germs. But you must not expect your dentifrice to do all your work for you. A mouth wash is sufficient on waking. Weak salt water is good.

A good dentifrice and frequent brushing will do much to prevent the



decay of teeth. However, certain oral conditions will cause tartar or crust to form in nearly every mouth. There is but one safe way to remove tartar; let your dentist do it. Go to him once every six months and let him give your teeth a thorough cleansing.

Now, we come to the question to say that mouth breathing is harmful. This may be due to nose or throat trouble, and it is advisable to see a doctor without the least delay. The proper time for cleaning the mouth is after each meal and before going to bed. The last is the most valuable as it is during the night that conditions for fermentation of food particles are most favourable. We must bear in mind that cleanliness of mouth before going to bed is of tremendous importance and more

necessary than the first thing in the morning which is the common practice among a large number of the population. Use a tooth brush of the finest bristles, and get one that is really scientifically designed and not stiff, but with bristles arranged in a saw-tooth formation and with the end tufted so that the brush reaches between the big molars in the back of the mouth. Such a brush will clean every part of every tooth every time. Before brushing, remove any large particles of food lodged in between the teeth with a soft tooth pick taking care not to injure the gums. After the use each time the tooth brush should be well washed in soap and hot water, then shake off the water, and put it in an airy place to dry. I shall advise to have two brushes—one to be used for one week in turn; or one for each day in the week. Artificial or false teeth should be kept in an antiseptic lotion during the night.

If charcoal is used it must be ground into a very fine powder so as not to injure the gums. The poorer class of people who cannot afford to buy a tooth brush may improvise from any of the following by cutting off one end until it forms into a sort of brush with soft bristles:—(1) Root of *Kollukkayvillai* (Tamil):—*Tephrosia Purpurea*, (2) Root of *Pungam Maram* (Tamil):—*Pongamia Glabra* (3) Root of *Elumpunkkai* (Tamil)—*Simplocos Spicata*, (4) Stem of *Chittamanakku Amanakkam Chedi* (Tamil)—*Ricinus Communis*.

The question of what tooth powder to use is also important. Those who are not able to visit the dentist for bleeding gums and pus exuding from gums etc., may try the following.

Take *Kadukkay* (Tamil)—*Terminalia Chebula*—roast well and powder very finely. To a handful of this add one cent weight of Camphor and powder again. You can obtain these ingredients from an ordinary Kaddy. Use this as a tooth powder three times a day after meals, for gentle massage of gums. Irregularity of teeth prevents the normal occlusion i.e. the proper meeting of the teeth of the upper and the lower jaws. Disarrangement of teeth causes difficulty in cleaning them properly. Hence, dirt accumulates between the provincial surface of the teeth, helping the growth of bacteria. Mouth is always exposed to the bacterial invasion and its temperature and moistness are suitable for their growth. So, if they find any lodging due to uncleanness, they begin to multiply rapidly forming Lactic acid in the course of fermentation of the food particles. This Lactic acid and bacterial action cause various diseases such as dental caries (cavities into the teeth), pyorrhœa alveolaris or gum abscesses etc., which help the untimely shading of the permanent teeth. Thus, the neglected baby teeth are the root of many dental diseases. We also know that from dental disease many other systemic diseases come forth, which destroy the domestic peace and happiness.

Poisonous Emotions

“You can't be healthy unless you are happy,” says Dr. H. A. Clegg, in his book, *Brush Up Your Health*. He points out that although the doctor cannot administer happiness in doses three times a day in a wine-glass of water, he can tell you that if you are miserable, discontented, bitter and envious, good health will not come your way for the asking. All these things invite and breed ill-health. Hence it behoves each genuine health-seeker to take stock of his or her mental and emotional equipment. If this is done honestly and thoroughly, humiliating surprises may be in store for the individual. But, if the actual situation is faced frankly and courageously, there is every reason to believe that mind and heart may be cleansed from poisonous emotions and so made free to exert a correspondingly healthy influence over the body.—*Good Health*.

PRICKLY HEAT

By DR. S. K. SHRIVASTAVA, L.M.P.,

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PRICKLY heat is a seasonal skin disease of fungous group of tropical climates, usually as the result of excessive warmth and

sweating to heat affecting the cutaneous parts which are covered by clothings. It is also called 'Lichen Tropicus', 'Lichen Papulosa' and 'Miliaria Rubra'.

Prickly heat consists of miliary like eruptions, innumerable red spots with tiny central vesicles containing turbid fluid. These are minute shining glass-like vesicles closely set and slightly inflamed papules and give the skin the appearance as if thickly sprinkled with grains of sand. These spots are hardly elevated and they are not follicular.

Ætiology.—Nearly every European in the tropics suffers from prickly heat. Indians too are not exempted. It is commonly seen in every person of any age during the months of summer and rains (May to September) when the weather is hot, damp, and perspiration is profuse and not evaporated freely. Ladies observing street purdah system remaining in close rooms, having covered themselves with garments, working hard in the house and cooking meals before fire, are generally affected. The people are not acclimatised but continue to exhibit their crop of prickly heat year after year, when hot season comes round.

The eruptions are most profuse on those parts of the body which are closely covered with clothings—*viz.*, around the waists, trunks, axillæ, crutch, groins, under the mammal in women, between the folds of skin in fat persons and proximal segments of the limbs. It also occurs on the back of the hands, on the arms, legs, forehead, occasionally on the face, the scalp, in fact on any part of the

surface of the body except the palms and soles.

The predisposing factors may be :

- (1) Seborrhoeic state.
- (2) Wearing of excessive clothings and unsuitable dresses.
- (3) Over-eating—high proteid diet.
- (4) Abuse of alcoholic drinks.
- (5) Hot drinks.
- (6) Hot bath.
- (7) Violent exercise, over manual work.
- (8) Dyspepsia.
- (9) Constipation.

Prickly heat is very annoying and troublesome though unattended by danger. It is not grave for healthy and robust persons but in invalids, sickly children, hysterical and specially parturient women, it gives rise to sleeplessness and restlessness and turns to a serious matter.

Most distressing symptoms are itching, pricking, tingling and burning-sensation over the erupted part of the body. Anything leading to perspiration provokes an outburst of intolerable itching. Hot drinks, exposure to the hot sun, close rooms, warm clothing all aggravate the distress. The eruptions may keep out for months becoming better or worse according to the circumstances.

Sometimes, these tiny vesicles pustulate and cause boils due to invasion by the micro-organisms of furuncular diseases, as there are breeches of surface following on scratching the skin to allay itching. As soon as the hot

season passes and cold season sets in, these symptoms subside themselves.

Treatment. — *Prophylactic Treatment*.—1. Light clothing—The best fabric for the tropics is one made of large meshed material consisting of silk, cotton or mixed. The garments should be loose and porous and daily washable. Underwears should be at once changed as soon as they are wet with perspiration. Closely woven woolen or flannel garment should be avoided.

The sleeping mattress and pillow should be covered with a finely woven grass-mat (*Shital-patti*). Cotton or woollen mattresses should be avoided. To pass the day in a well ventilated, dark, cold and calm room cooled by *Khus-Khus* (Rhizon grass-root fibres) purdas, sprinkled with water and fanned, will be very soothing and pleasing. A fan (*Pankha*) at night gives great comfort.

2. Avoidance of all causes of perspiration:—Avoid hot drinks, close room, sea-bathing, excessive use of caustic soap in bath, exposure to hot sun and excessive exercise. Muscular work should be performed in early morning and evening hours. For the poor labourers who cannot avoid sun and manual labour, the best plan is to anoint their skin every morning with animal fat (cheapest) or common oil—the best is olive oil.

3. Regular bath:—Regular bath and habitual use of Boric dusting powder will prevent the attack.

Afridol Soap can be recommended as preventive and curative. The poor who cannot afford the costly soap may use ordinary glycerinated soap or any bath-soap followed by application of common oil and then rinsing their body with water.

Regular bath should be taken morning and evening in summer—after drying the skin with absorbent

towel—the towel may be rubbed harder against the body so as to break the vesicles—this will relieve the itching; then the dusting powder should be freely applied (equal parts of Boric acid, Zinc Oxide and Starch) particularly to the arm pits, under the mammal in women and between the folds of skin in fat persons.

4. Avoid constipation. Treat Dyspepsia. Occasionally, aperients (laxatives) should be taken. Magnesia Citras effervescent is the best aperient in this time. Magnesia Citras Effervescent, one to four drachms in half a tumbler full of water, with drachm one of fresh lemon juice with sugar would serve as a mild laxative and cooling draught.

Diet should be temperate and rational. High proteid dietary and alcohol should be avoided.

5. To allay itching and pricking distress:—The following lotions for external use are recommended. Any one of them should be tried:

- (1) Equal parts of Sol. Volatile and water.
- (2) Inunction of a mixture of Almond oil and Eanolin in the proportion of 8 to 1, and scented according to fancy and taste, with rose, khus, sandal, otto-jasmine etc.
- (3) Lotion of Calamine with Acid Carbolic lotion (1 in 1000).
- (4) Copper Sulphate grs. xx dissolved in an ounce of water. The solution to be dabbed legibly on the parts affected.
- (5) Potas. Carbonas ʒ ii in half a pint of water.
- (6) Soothing evaporating lotion may be applied to parts severely irritated. Liquor Plumbii dil (Lead acetat lotion) mixed with 2% Liquor Carbonis or Spirit lotion 1 in 10 with Calamine.

(7) Sandalwood, saffron (*Keshar*), and camphor being rubbed against a smooth stone slab with water gives out a very smooth, cool and aromatic emulsion which may be applied lightly over the erupted parts. It relieves itching and pricking.

(8) Cheapest and the most handy is Saline solution with common oil.

Common Salt (Sod. Chloride)	..	grs.	xx.
Aqua Rose Dil.	...	oz.	i.
Common Oil	...	oz.	i.

—well mixed should be applied freely over the body.

(9) The following powder gently rubbed in for five or ten

minutes with a damp sponge will cure the bad patches :

Sulphur Sublimata...	80 parts
Magnesia	... 15 parts
Zinc Oxide	... 5 parts

(10) Internally—Cold drinks. Fresh Lemon juice with sugar and *Podina*. Copious drink of barley water. A brisk purge and twenty four hours' starvation will cut short an attack.

(11) In severe cases of sleeplessness and irritability of temper due to prickly heat—a trip to the nearest hill-station (cool place) is very beneficial.

Differential Diagnosis.—Miliaria or Sudamina—In various febrile conditions attended by profuse and excessive perspiration, sweat rashes appear but usually they pass off and the fever subsides.

Three Golden Rules of Nutrition

In cooperation with the Federal Office of Defense, Health and Welfare Services, the Women's National Emergency Committee currently broadcasts a Sunday afternoon radio series, *Listen America*, over the NBC Red Network. On this program are presented the following "three golden rules of nutrition."

1. A sound foundation for buoyant health can be built with seven ordinary foods: milk, fruits, eggs, seafood, meat, green vegetables, and bread with adequate vitamins in it.

2. As far as you possibly can, see to it that every day you take at least: a pint or more of milk, so as to get some vitamin A, some of the B vitamins, good proteins, and plenty of calcium; enriched bread or biscuits, or whole grain cereals, or whole wheat bread (and enriched flour wherever you use white flour for cooking purposes), so as to get B vitamins and minerals; either a tomato, an orange, a grape fruit, or their juices, so as to get plenty of vitamin C; a big helping of green leafy vegetables, and sometimes yellow ones (raw or lightly cooked), so as to get more proteins, several B vitamins, and iron; an apple, a peach, a pear, or other fruits in season, so as to get added minerals and vitamins.

3. Then, unless your doctor has you on a special diet, eat anything else you like, with moderation, including the necessary fats. You will, in this way, be getting a daily nutritionally adequate diet.—*Illinois M. J.*

Evacuation and Physical Betterment

BY L. M. CHITALE, F. R. I. B. A., A. M. T. P. I.,

Chartered Architect and Town Planning Consultant, Madras.

IF the blitz has taught urban folk a lesson, it is this: they must disperse to the country-side whenever national security is threatened by the air-arm. Both the people and Governments realise with Herbert Morrison that "absence from the scene of danger is the best protection of all." Citizens flee for safety to villages; Governments move to the interior; and business houses to the outskirts of cities; all this with no small sacrifice, discomfort and dislocation.

The grave consequences of evacuation have become apparent not merely in the battered West, but in India too. That this is fraught with grave consequences to the nation is evident from the careful observations and studies made by expert authorities in Great Britain, whose evacuation scheme, costing £ 36,000 a day, was hailed as the best possible experiment ever put into practice. Within four months of operation, the position revealed was as follows:

"Husbands have been parted from wives, children from parents. Domestic privacy has been invaded. Urban and rural ways of life have been brought into sharp conflict. The educational system has been temporarily reduced to a shamble and a great strain has been placed upon Local Government authorities in areas which have received a great influx of population."

The setback to education has been considered the greatest disadvantage to the children of the present generation. The dangers of ignorance and indiscipline, it has been pointed out, are more serious than the risk of being killed or maimed by enemy bomb.

The harm evacuation can cause to

a nation can only be assessed after sometime, but whatever is now apparent is sufficiently grave. Stated summarily, on its personal side, evacuation results in the destruction of home life on an unprecedented scale; the separation of parents from children and of husbands from wives. On its commercial side, it leads to an exodus of banks, insurance offices and other undertakings to unsuitable residential buildings in the suburbs which must inevitably have detrimental economic consequences. In regard to dispersal of the Government offices, it leads to inconvenience to officials and pressure and strain upon localities selected for reception.

Under these circumstances, voluntary dispersal fails to achieve permanent success and no wonder, evacuees returned back to London and other vulnerable cities within a short period. They would rather risk air-raids than face the problems, social, psychological and economic, given birth to, by the separation and the new environment for which they are misfits. Even in India, within the last few weeks, the difficulties of evacuees have become so prominent as to invite the attention of authorities and local bodies. The abnormal rise in rent in areas flooded by the citizens, the inadequacy of water, sanitary facilities, medical aid, etc., the trouble of securing suitable accommodation, have drawn the attention of Government. In Madras city where the Government advised evacuation of non-essential population, women and children began to return a week after the scare.

There is no knowing for how long the threat of aerial bombardment would continue for our cities. The evacuees will inevitably return,

complicating the task of Government. Even in Great Britain, where accommodation in private homes was available for 5 million people according to surveys carried out before the great evacuation, many camps of a semi-permanent type were erected. The Committee of the Association of Architects, Surveyors and Technical Assistants, carefully studied this problem and their report presented an over-whelming case for the creation

would make evacuation effective and harmless. These structures would not lose value after the war, like defence constructional measures, but would serve a great social and educational need, in that town-children could, in summer, spend a part of their time in these fully equipped camps. Local Authorities, Insurance Companies and Co-operative Building Societies could be induced to invest part of their capital which



CHINA'S SUPPLY LINES

A camel train, laden with supplies from Russia, is seen here crossing the Pamir range in Southern Russia enroute to Chinese bases. This route, formerly impassable during 8 months of the year, has now been modernised in 1938.

of special buildings for evacuation, including schools. They are considered absolutely essential on health, education and moral grounds and their absence a sure cause of collapse of schemes of evacuation.

In India, for very much less expenditure, semi-permanent structures could be erected at convenient spots within the access of cities, which

could be recovered from holiday-makers and others in the post war period. Such camps could develop small industries catering to the cities and might even be made self-supporting.

These post-war, health and holiday resorts could be gradually developed into townships, residential estates, educational centres, sanatoria etc.,

so as to bring about effective dispersal of our urban population over the land and a gradual transformation to give India the correct balance of urban and rural interests. This could easily be brought about if only this task is assigned to an expert body, who could visualise and plan a healthier India through the camps of today.

The advantages of such a scheme are far more than what is apparent. Not merely will they help the citizens to be safe with the minimum of dislocation during the present emergency, but will in the most effective fashion lead to the improvement of the citizens' health which all of us desire. It will enliven urban life which is very badly needed; it will relieve urban congestion, it will restore the broken links between town and country, and establish the lost balance between agriculture and industry. Even in Great Britain, such a programme is expected to "end that lack of sympathy between town and country which the present scheme has exposed"; this can enrich life and at the same time, broaden that of the town; this can keep our children in safety by measures of defence that will not only protect from attack but would give lasting benefits in health.

The Fabian Society, after careful examination, feel that to make evacuation a complete success the social pattern of the country side has to be re-fashioned in a relatively stable direction. "A well-designed experiment in social reform would leave the country a heritage of camp schools, village halls and clubs, nursery, hostels and the like, such as it had never before enjoyed. Permanent links could be established between urban and rural community. A sense of values of right feeding, of air and sunshine, of child nurture and of social enterprise could be carried to half the homes of the land. In fact, the Board of Education and the Ministry of Health in great Britain jointly advo-

cate the setting up of "Nursery Centres" in reception areas. Lanchester, the well-known architect, has even prepared a scheme for their equipment. Such centres will be a boon to our country especially to the upper classes.

A well-designed scheme worked out by an expert body could achieve considerable economies and a healthy national growth, with the aid of these permanent structures by securing permanent decentralisation of population and production. This will end to a large extent the need for evacuation whenever national security is threatened.

Permanent camps further will supply the ladder back to land which will check the growing deterioration in the health of urban folk. A periodic relief from the dust, noise, smoke and lack of protective foods to which urban inhabitants are subjected to, is essential to keep them in sound condition. Evacuation schemes can be successfully harnessed to this purpose and physical betterment will automatically follow. A wonderful opportunity has now presented itself for all those interested in health and welfare. The Health department of the Provincial Governments have now an ideal time to concentrate and carry out experiments in the respective field and Rural Reconstruction associations could offer their valuable help in making such experiments a success.

It is high time we relieve urban areas of the congestion, over-crowding and their consequent evils, and developed garden cities and satellite towns which would free citizens from dust, noise, smoke etc. Many attractive places abound all over the country which could serve as reception centres for the present and the ideal townships of tomorrow. Seaside resorts, pilgrim centres, market centres and healthy areas, fit for sanatoria could be selected. Suitable structures, not like the one room tenements which are in evidence in

urban life, but fit to suit Indian conditions, surrounded by vegetable gardens, poultry farms, dairies and play grounds, as well as cooking accommodation are needed. A school for the children of the surrounding area could be built.

We should, however, remember that these camps should be in small units, away from the main roads to prevent ribbon development and to be less vulnerable to air attacks. Adequate provision should also be

made for safety, for marketing and for transport. Sites should be chosen with care, since these have to become future townships. The Development departments of Government could arrange periodic demonstrations to bring home to the people new ideas and improvements. Such centres could be developed so as to supply protective foods and other requisites for adjoining cities and herein lies the "Open Sesame" for the physical regeneration of our urban folk.

Should Women Smoke?

By Alonzo L. Baker,

Field Secretary, Race Betterment Foundation.

FROM every corner of the land, I hear feminine voices instantly replying, "Why not? The men smoke, and we can too, if we wish. Whose business is it anyway if we women want to smoke?"

There can be no argument whatsoever that so far as personal liberty is concerned, women have the same right to smoke as do the men. However, here are two facts that should be borne in mind by every girl and woman in America:

1. *Tobacco harms women more physically than it does men.*
2. *Tobacco does more damage to the race through mothers than through fathers.*

Now, that isn't the fault of the men, neither has it anything to do with "equal right," or "equal suffrage" or any other moot question. As the small boy would say, "It is just one of those things." If it had never been intended that women should be mothers, perhaps then tobacco would damage them no more than men, but women are made differently because

they have a different function to perform in life.

Repeated tests have shown that women respond more actively to smoking than do men. The quickening of the pulse is more marked in women when they smoke than in men; the same amount of tobacco will produce higher blood pressure in women than in men; the temperature of the hands and feet (due to constriction of the blood vessels) is lowered more in women than in men after the smoking of even one cigarette.

In both men and women tobacco is the foe of a normal cardiovascular system. Because the primary effect of nicotine is the constriction of the capillaries, veins and arteries of the body, both the pulse rate and the blood pressure are raised, thus putting more work on the heart and more strain on the blood vessels. All these effects are especially deleterious to women, for they increase the tension and nerve pressure under which they must live. Women always have been more inclined to nervousness than have men, and now with so many

women smoking, this condition has been considerably worsened, as every physician who sees patients daily in his office can testify.

One of the most baleful effects of the use of nicotine is the extra load it puts upon the kidneys. While it is true that much of the poison brought into the body by tobacco smoking is thrown off by the lungs and skin, yet tobacco adds a definite load to the kidneys in their valiant

endeavor to eliminate the poison. Anything which overloads the kidneys should be carefully watched by Americans, for our kidneys are not holding up too well under the program of diet, living habits etc., which we follow. In the case of women who are to become mothers, kidney overload should be particularly guarded against, for pregnancy always puts a great strain on the kidneys, even when such poisons as alcohol and nicotine are not present.

And that brings us to the vital question of the effect of tobacco in pregnancy.

These two facts are indisputable: (1) Nicotine

is one of the few substances that passes through the placenta to the fetus; (2) Nicotine passes to the infant in its mother's milk.

In view of the virulence of the poison that nicotine is, damage both to the unborn child and to the nursing child is inevitable when he is nicotineized before and after birth.

Thousands of experiments have been made upon the progeny of the lower animals, but all reveal the same result. For example, in 1937,

L. A. Pechstein and W. R. Reynolds tested the effects of tobacco smoke on four generations of white rats. (See "How to Live" by Fisher and Fisk, pp. 283-284.) Four facts were revealed:

1. The size of the litter was reduced in all generation. The average litter became 3.4 instead of the normal 8.5.

2. Many of the young were stunted.

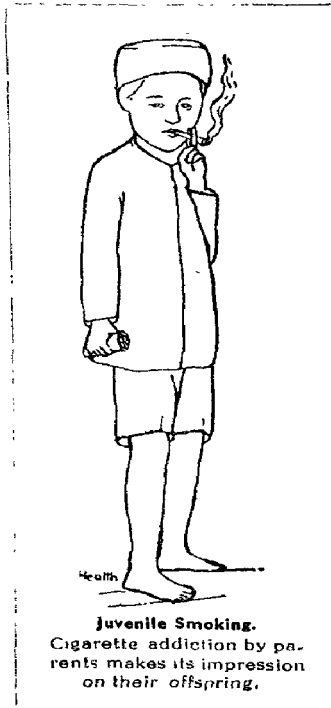
3. Each succeeding generation of

smoke-fumed rats became less adept in finding their way out of a maze. (A mechanical contrivance to test the mentality of the rat).

4. The prenatal and postnatal mortality rates were increased from generation to generation, until only 17.6% of those born in the fourth generation survived. Thus, the stock was practically eliminated by four generations of exposure to tobacco fumes. Each generation was subjected to the fumes of tobacco from 30 minutes to 3 hours daily from 30 to 62 days. The tobacco burned varied from 5 to 20 grams at each fuming, and was burned in a small tubular container in the

center of the cage. Since nicotine has a high boiling point (447.2° F.), much of the poison never reached the rats because of condensation on the walls of the tube and of the cage. The human mother who smokes absorbs much more nicotine into her system than those rat mothers did.

It has been proved too, that the heavy use of nicotine through sclerosis produces atrophy and degeneration in ovaries and testicles, and thus tends to barrenness.



To be sure, the smoking habit has become widespread among women of recent years only in America, and medical statistics over a long period of years are not therefore available, but preliminary reports thus far made indicate that the number of stillbirths and premature children born to habitually smoking mothers is markedly higher than to mothers who are abstainers from tobacco.

Physicians also report that as smoking among girls and women increases, the number of women patients suffering from impaired endocrine activity is also increasing. This is inescapable, for the ductless glands of the body, such as the pituitary, the thyroids, the adrenals, and the ovaries, are closely linked with the emotional balance of the body and anything, like nicotine, which increases nervousness, raises the blood pressure, increases the pulse rate, etc., must take its toll of the power plants and regulators of the human body—the endocrine glands.

The active principle in the secretions of the ductless glands is called a hormone. The hormones have a vitalizing and balancing effect upon all the tissues, nerves and bodily processes. They are the dynamos which activate every organic mechanism. When nicotine depresses the action of the glands, it depresses the activity of the hormone. Nicotine is a narcotic, and acts as a depressant upon all the glands of the body. The glands are greatly handicapped in normal functioning when such a heavy millstone as nicotine is attached to them.

Just cause for alarm is the rapidly growing number of girls who form the tobacco habit before they have come to physical maturity. Smoking

on the part of girls during their teen years is nothing less than a tragedy, for those are the years when nicotine does its greatest damage to the growing nerve and glandular systems of the female body.

From the physical point of view tobacco does more harm to the people than does alcohol; for a greater number of people smoke than those who drink. Furthermore, among smokers the percentage of heavy smokers far exceeds the number of heavy drinkers among those who indulge in alcoholic beverages. This is particularly true among girls and women who drink immoderately.



Unhygienic life of cigarette addicts.

We do not wish to be misunderstood on the use of "moderate" and "immoderate," for we hold that the use of any poison is unwarranted, and that even in moderation, the use of either alcohol or tobacco damages the user, but at the same time, it is evident that so far as the effect upon the body is concerned, alcohol and nicotine in large dosages do more injury than in small amounts.

That the abstainer from nicotine has decidedly better chances for a long life than even the moderate user, was made evident by the exhaustive research of the late Dr. Raymond Pearl, of Johns Hopkins University.

Dr. Pearl and his associates made complete life-tables on 6,814 white men beginning with the age of 30 to the time of death. He divided this group into three—2095 non users of tobacco; 2814 moderate smokers; 1905 heavy smokers.

For each 1,000 of the men studied, the following table shows how long they lived :

Age.	Non-Users.	Moderate. Smokers.	Heavy. Smokers.
30	1,000	1,000	1,000
40	915.5	903.8	811.9
50	811.6	784.4	627.0
60	665.6	619.1	462.3
70	459.2	414.3	303.9

This table shows beyond dispute that the abstainers at every age level lived longer than the moderate users, and much longer than the heavy users of tobacco. In another study made by Dr. Pearl he ascertained that the heavy users of tobacco die sooner than the heavy users of alcohol.

It is true that the table above was made after a study of men only, but

women fare no better, and in some respects worse, from the use of tobacco than do men. With the astounding increase in the number of women smokers during the last ten years, the conclusion is inescapable that the health of our women will be severely damaged, and worst of all, that American babies, many of whom are being born and will be born of tobacco addict mothers, will be fearfully handicapped by the poison habit of their mothers.

We come back to the question asked in the title, "Should Women Smoke?" As we look at that question in the light of what tobacco does to the female body, and through her to the children of our race, we think of the observation that Charles Kingsley long ago made. Kingsley declared there are two kinds of freedom: freedom to do what one likes, and freedom to do what one ought. Said Kingsley, "The first freedom is a fallacy, for in the last analysis, men are free only to do the things they ought." — *Good Health (U. S. A.)*

PHYSICAL CULTURE

BY LGR. S. NATARAJAN, *Weight-Lifter, Coimbatore.*

I

JUST as we find coal is very essential to a railway engine, a well-balanced food-stuff is also an essential factor to our human body. That nourishment, that is being taken in, is being converted into pure blood, which circulates throughout our body supplying the parts of the body the essential food, which in turn gives the body, heat or *sakthi*, as we may call it. It is only on account of this kind of *sakthi* or force, that our body is maintaining its movements. The foodstuff, we take in, consists of proteins, carbohydrates, fat and aqua or water, as it is otherwise called. So, leading a happy life, mainly

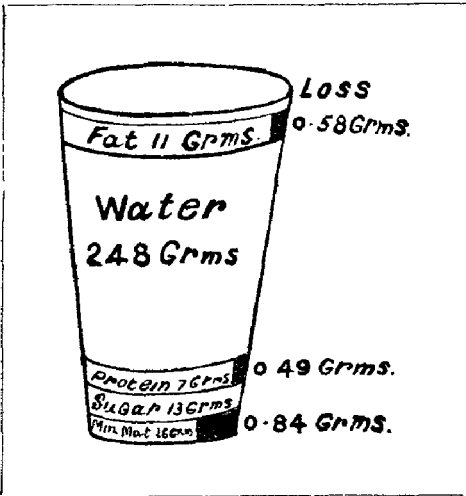
depends upon physical exercise, combined with a good amount of nourishment, provided the same contains the various kinds of vitamins A, B, C, D, E, F and G. These can be otherwise called as "Heat-giving substance, flesh-forming substance; and lastly mineral-substance". Sugar and oil *e.g.*, are essential to produce heat and hence they can be classified as heat-giving substances.

Flesh forming substance is essential to put more growth in the skin and thereby its power is increased. In short, we can infer, it is essential for endurance. The body also would not become physically tired very shortly. Mineral substance is necessary for the

growth of nails, teeth and bone. Man's strength and weight depend mostly upon bones. Hence is the need of these vitamins in our food-stuffs, to overcome the physical fatigue.

Milk is more important to our body. If the composition is broken, it loses its original quality. Hence is the fact that the boiling point should not be exceeded. Medical practitioners recognise the supreme value of milk and widely recommend it under proper conditions of health. But still, many doctors hesitate to put patients on a milk-diet. The residue or curds, which is hard, remains in the stomach throwing much amount of strain on the organs of digestion. The striplings naturally are unable to bear this strain. Further any liquid other than milk, cannot take its place. But no doubt the curd is a factor, which makes the bone, the nail and

easily digestible form. The doctors also can exercise effective administration especially in the treatment of hyperacidity. Cow's milk contains 4% sugar, 4% fat and 4% protein. The advantages of boiled milk are: it is cheaper, and it can easily be obtained. Further, because it is boiled, the curd is easily digestible; germs are also destroyed. Now, turning to the other side, the taste is altered; vitamin is lost. Composition is varied. Because it is not boiled, there is chance for typhoid and tuberculosis being carried. In the case of dried milk, advantages are sterility, making easily a mixture and curd being made digestible. Tracing the other side *viz.*, disadvantages, just think of the cost. Further, you will find loss in vitamin value. Readers' attention would be drawn to the following table, which gives the composition of common foodstuffs.



	Water.	Fat.	Carbo- hydrate.	Protein.
Rice ...	15%	1%	77%	7%
Milk ...	87	4	5	4
Bread ...	40	1	52	7
Eggs ...	78	10	0	12
Meat ...	72	8	0	20
Potatoes ...	80	0	18	2

So, from the above table, we can arrive at the conclusion that liquid *viz.*, water is the most essential thing for digesting the subsidiary solids *viz.*, the vitamins with their respective and proportionate composition. Next to aqua, comes carbohydrate which is quite necessary to restore strength, buoyant health and vitality.

II

Weight-Lifting Extraordinary

India Vs. Ceylon Championships

the teeth grow and of course they obtain strength. Several methods of modifying milk have been recommended. Curds are also modified by eight methods. This kind of modifying milk, so that casein will no longer form tough curds, has been very easily recognised. By presenting a vast area to gastric juice, curd milk provides the patient with milk in an

Here is an account of the Indian *vs.* Ceylon Weight-lifting championship held at Zahira College, Colombo early in the second week of December 1941, which, I hope, would be of much use to those who want to have a thorough knowledge

of the recent contest for the championship title.

This Indian *vs.* Ceylon Championship meeting was composed of so remarkably stylish performances and surprises that it held the attention of the audience throughout the day of the tourney. The tournament was held in different classes of body-weight *viz.*, Feather-weight (119 lbs-132 lbs) Light weight (132 lbs-148lbs) and middle weight (148 lbs.-165 lbs.) so as to determine the champions of 1941 in all classes of body weight.

Judges, referees, technical adviser, master of ceremonies, steward and clerk of scales were chosen from the list of talented members given in the brochure and were given an opportunity to officiate. To avoid unnecessary troubles and possible dangers loaders and catchers were stationed.

In the Feather-weight class, B. K.

FEATHER-WEIGHT. (119—132 lbs.)	T. H. PRESS.	T. H. SNATCH.	T. H. C. & TERN.	TOTAL.
B. K. Bose (India.)	130 lbs.	135 lbs.	185 lbs.	450 lbs.
E. Siresena (Ceylon.)	125 lbs.	125 lbs.	185 lbs.	435 lbs.
LIGHT-WEIGHT. (132—148 lbs.)				
L. P. G. Ghularatne (Ceylon.)	140 lbs.	160 lbs.	200 lbs.	500 lbs.
A. Gafoor (India.)	150 lbs.	150 lbs.	190 lbs.	490 lbs.
MIDDLE-WEIGHT. (148—165 lbs.)				
Noel E. de Abrew (Ceylon.)	160 lbs.	170 lbs.	230 lbs.	550 lbs.
Agit K. Sen (Bengal.)	160 lbs.	170 lbs.	210 lbs.	540 lbs.

Bose (Bengal) put up an astounding performance by establishing a grand total of 450 lbs. in 3 particular lifts *viz.*, two hands military press, two hands snatch and two hands clean and jerk. E. Siresena Fernando (Ceylon) came second by putting up a total of 435 lbs.

In the Light-weight class, to their credit, L. P. G. Ghularatne (Ceylon) and A. Gafoor (India) set up total records of 500 lbs. and 490 lbs. respectively in the 3 respective lifts.

In the middle-weight class, Noel E. de Abrew (Ceylon) and Agit K. Sen (Bengal) put up fine performances by retaining grand totals of 550 lbs. and 540 lbs. respectively in 3 particular lifts.

Readers' attention is drawn to the following table so as to enable them to have an idea of the records set up in this tourney.

Trophies were distributed by prominent lovers of sane lifting. And so ended the 1941 Championship Contest on the verdict of "best lifter" for 1941, a new hope being sounded for better talents at the ensuing championship (perhaps in February 1942).

"The foremost among the obvious reasons why seamen on ocean-going vessels are prone to acquire venereal diseases may be cited as the removal of restraint which is automatically imposed by proximity to family, friends, regular living and wholesome environment".
—V. D. *Information*.

[That is why perhaps ancient India treated ocean going as one of the great sins].—ED., *Health*.

Treatment of Shock

SHOCK is a depression of the nervous system which finds expression in loss of body heat and when severe in loss of consciousness. If this loss of heat proceeds beyond a certain point, the vital functions cannot continue their inter-action and death must result.—N.C.F.—*First Aid*.

Foreign Body in Stomach

SINCE there is no immediate danger to life or to part except from attempts to make patient vomit or by administration of aperients, no actual first aid treatment is indicated. In the circumstances named, the patient should be told to keep quiet or if a child to go to bed until medical aid is available. If this be long delayed no harm can result from giving stodgy food or perhaps sandwiches composed of thin bread and butter with a thin layer of cotton wool between the slices of bread.—N.C.F.—*First Aid*.

Accidents in the Home

IN one year home accidents have killed 33,000 persons, caused 4,850,000 disabling accidents—of which 140,000 resulted in permanent disability—and cost many millions of dollars," R. L. Lee, Long Beach, Calif, declares in *Hygeia, The Health Magazine* for February. "In five years these accidental deaths have totalled 167,000, with injuries and property losses mounting accordingly. In our ardor for national defense against foreign foes, this grisly home accident is overlooked or given only sporadic attention.

Children, the author explains, are frequently the victims of home accidents. They set fire to their clothing by playing with matches when they are accessible, by turning up gas burners and by pulling over lamps. They should not be, but sometimes are, allowed to play in front of unscreened fireplaces.

In the case of adults, Mr. Lee points out, "falls have been found to account for more deaths and injuries than any other type of home accident. Yet they could be largely eliminated if people would form better habits and stop taking foolish chances. The country over, falls cause about 16,000 deaths every year; they are usually the result of neglected trifles. Stumbling over furniture in a dark bedroom...is one of the chief causes of fatal falls.—*Texas S.J.M.*

Our Role in Defense

NOW that war is a reality, we, no doubt, hear many say—"What can I do for Defense?" And all around us, we see a general scrambling, grasping for something, we know not what, which is very confusing.

Let us pause for a moment and "take stock" so to speak, of our own activities. All

or most of us have definite home responsibilities which we cannot and should not ignore. Our Defense begins there.

First, let us promote emotional stability and good morale by our positive, "make-the-best-of-it" attitudes.

Restrictions may be inconvenient, but somehow nothing ever becomes too bad," and we still have everything to be thankful for in this great country of ours. Let us be alert regarding instructions given us for emergencies, and cooperate in every way possible, so that we will be prepared.

Food in safeguarding health is as important as it has always been—wholesome, balanced meals mean healthy bodies and beings. Thousands of women are attending Red Cross nutrition classes, learning what to eat, and how to feed people for proper nutrition. Plan simple, nourishing meals for your family. Eliminate wastefulness, and utilize or cut down on leftovers. Speaking of conservation, watching unnecessary lights will reduce your electric bill. You can conserve on heat. Do you take good care of your equipment—in fact, of everything—to make it last longer? We have a fine opportunity to learn a good lesson in thrift to-day.

Remember, too, your tendency toward hoarding may bring about more restrictive buying in certain household commodities and, eventually, rationing. Be patriotic by *not* hoarding.

Let us be able to say to ourselves—"I am doing a good job of Defense at home by promoting emotional stability and good morale, preventing wastefulness by conserving and not hoarding, feeding my family properly and simply."

In addition, some of us may still be able to assist in national protection and defense through civic service outside the home.

The task of war can be shortened by your and my cooperation and concentration in concerted action!—*Minnesota Medicine*.—W. E. H.—*London Hospital Gazette*.

Flushed Face in Alcoholic Poisoning

ALCOHOL, taken internally, causes the heart to beat more rapidly and more forcibly; and at the same time it dilates the blood vessels of the body, including those of skin and eyes. Consequently, the face is flushed and the body temperature falls from loss of heat.

On the other hand, when some condition producing high fever exists, Nature endeavours to reduce the feverish state by causing the blood vessels to dilate, whereby more blood is brought to the surface of the body and thus cooled more quickly. Consequently until Nature succeeds in her efforts there are a flushed face and a raised body temperature.—N.C.F.—*First Aid*.

Special Foods for Aged

SPECIAL foods for middle-aged and aged people may be the next step in nutrition, according to a food survey reported to the American Chemical Society by Dr. William A. Hamor, associate director of the Mellon Institute of Industrial Research, Pittsburgh.

"New advances have been made in infant feeding and the nourishing of 20,000,000 school children," said Dr. Hamor, "With less than 2,000,000 babies born a year, infant-food manufacturers are distending their markets with lines of products for older children. It has been predicted that the next step may be foods especially for the middle-aged and aged, an advance that may be nurtured by the growth of interest in geriatrics (science of aging)."—*Science News Letter*, January, 24, 1942.—*Minnesota Medicine*.

Choking on Food

CHOKING on food can be serious and sometimes fatal, *Hygeia*, *The Health Magazine* says in answer to an inquiry. The greatest danger is that of suffocation from a large mass that may stick in the region of the vocal cords and cut off the air supply. The choking person should be placed face down and given as much breathing space as possible. Constricting collars or bands about the neck should be removed and an effort made to get the patient to the hospital as quickly as possible. It is of little value for the ordinary bystander to attempt extraction of any mass with the fingers or simple instruments that may be at hand. No attempt should be made to force the person to swallow water or other liquids. If the patient survives long enough to be taken where expert attention is available, successful removal of the foreign material is usually possible, *Hygeia* declares.—*Texas S. J. M.*

Do You Know

THAT many cases of typhoid fever are caused by apparently healthy humans who carry the germs in their intestinal and urinary tracts and who are careless in the handling of foods?

That typhoid fever is now rarer in the United States Army than in most healthful cities and towns and that this is true because all soldiers are vaccinated against typhoid?

That typhoid vaccine is made from dead typhoid fever germs and that the vaccination is harmless?

That typhoid vaccination ordinarily protects one against the disease for from two to three years?

That those definitely exposed to typhoid infections should be revaccinated frequently?

That after World War I, the death rate from typhoid fever dropped most among men between the ages of twenty-one and thirty-five (draft ages)?

That raw foods, unclean milk, sewers, poorly constructed privy vaults, and human excreta left on the ground to drain into water

systems, are common sources of typhoid infection?

That typhoid fever can be controlled by the use of pure water, pasteurized milk, clean foods, proper sewage disposal and by the general practice of anti-typhoid vaccination?

That in preparing for a vacation you should select a place where drinking water and milk supply are pure, and when camping it is always best to boil drinking water unless you know that it is pure?

That travellers to doubtful sections of the world should fortify themselves by vaccination before leaving home?—*Illinois. M. J.*

Tuberculosis

TUBERCULOSIS occupies one of the first places in the disorganization of family life, both socially and economically. It breaks up homes, separates families, destroys husband-wife and parent-child relationships; and it renders many of its victims incapable of resuming their places in society. Economically, the cost of this disease to the community is tremendous. It costs a community from \$2,090 to \$5,000 to care for each case of diagnosed tuberculosis, depending upon the stage of advancement. It has its highest incidence during the most productive years of life, and the financial loss to the patient and to the country as a whole amounts to millions of dollars annually. From an epidemiological standpoint, the disease has the greatest incidence of any disease, with the possible exception of gonorrhoea and syphilis.—*GRACE M. LONGHURST, R.N., Amer. Jour. of Nursing*, Jan., 1942.—*Minnesota Medicine*.

Sanitary Requirements for Hotels

(1) All persons employed in the hotel must be scrupulously clean in person and attire. They should be required to submit to health examinations or procedures which the health authorities may see fit to require.

(2) The lunchroom and kitchen must be clean and as well equipped as it is possible.

(3) There must be present and in constant use the following equipments - a stove of such capacity as will furnish abundant heat for cooking and for heating large amounts of water; a place to wash dishes where they may be scalded with water over 170° F. and allowed to dry; a supply of dishes and utensils sufficient to permit good practice in the handling of food; a clean, tight cupboard for the storage of dishes and utensils used in cooking; a supply of kitchen linen or its paper substitute great enough to permit sanitary handling of the food; and an icebox or refrigerator, if such is at all possible.

(4) Food low in price is permissible, but it must not be fermented, decomposed, frost-bitten, unclean or of unsanitary quality.

"Leftovers" are never to be carried over to the next day. All food prepared must be eaten, or put in the garbage the same day it is prepared.

Student Health

Day-old products are not to be used if there is any ingredient which is capable of spoilage or fermentation. This precaution is particularly needed with products containing cream fillings, meringues, or non-acid dressings or sauces; such as mayonnaise, whipped cream, and French dressings.

(5) The housekeeping of the lunchroom and the kitchen must be above criticism. Particular attention should be given to the exclusion of flies, rats, mice, roaches and other vermin. Containers which are vermin-proof must be provided when it is impossible to eradicate these nuisances.

(6) The personnel and equipment must be under the daily supervision of some responsible person trained for such work who will have authority to order the abatement of a condition which may be dangerous. This responsible person shall decide whether a hotel worker is or is not fit to work on any given day. He shall take into consideration the following points and such others as seem pertinent or necessary to insure safety to the persons eating in the hotel:

(a) Is the individual clean in person and clothing?

(b) Is there suspicion that the worker is suffering from some communicable disease? If so, he should not be permitted to work there.

(c) Is there any infectious disease, such as scarlet fever, in the home of the worker?

(d) Is there any skin disease or discharging wound?

The hotel manager can see that sanitary precautions are taken and thus prevent the spread of disease through foods.—*Texas, J. M.*

[The above "Sanitary Requirements for School Lunches" are adapted to suit the case of hotels in India.]—*Ed., Health.*

Infant Health

INFANT mortality is made up of three factors: infants who do not live; infants who are killed; and infants who succumb to infection. The second class, both stillbirths and those who are born alive, are the measure of obstetrics, of the skill available and the rapidity with which it is applied. Theoretically, all these deaths are avoidable by medical skill. The first class includes all errors of intra-uterine life which result in poor quality babies who fail to survive extrauterine conditions. Their prevention must be ante-natal. The last class is preventable only by post-natal hygiene. In the prevention of infant deaths three factors are involved—communal hygiene, domestic hygiene and medical skill. The first and third are good, the second is poor. We agree absolutely with Dr. McNeil that our failure to reduce infantile mortality to its lowest limit is due to bad domestic hygiene, and its remedy is to see that the people can obtain good conditions and are properly instructed how to use them.—*The Medical Officer.*

THE present system of so-called education leaves much to be desired, but it is not our purpose to enter into a discussion on this very debatable subject. It is highly important that all work connected with the education of the child should be done at school. Why should children spend several hours in school and then have to work at home as well? In many cases there is no eight hours' day for the school boy or girl. In my opinion, home work should not occupy more than an hour. Unfortunately, every school teacher insists on home work on his own particular subject. Thus a boy may have to do a Latin exercise, a French version, and solve two or three mathematical problems besides preparing a certain portion of history, Latin and French grammar, as well as other subjects. In many cases this necessitates the entire evening being spent over school lessons. The child goes tired to bed and not uncommonly suffers from nervousness, indigestion and other troubles. Worse still is the case of the child who in Scotland, for instance, has to prepare for the School Leaving Certificate. This is a bogey which should be done away with for ever. If I remember rightly, it was instituted in 1886 and since then the papers set have increased in stiffness until at the present time they demand a knowledge far beyond anything the average boy or girl need possess unless perhaps a university career is being aimed at. At any rate, during the last couple of decades I have encountered many children who have been made nervous wrecks by being compelled to prepare for this unnecessary ordeal. In the case of those who intend to enter a university, the entrance examination is absolutely sufficient and a saner test of knowledge. Take, for example, the London Matriculation examination. This is a model of the limits which such examinations should reach. The Scottish School Leaving Certificate has grossly exceeded these limits, and should therefore be abolished forthwith.

If I were to summarise my suggestions for the improvement and maintenance of the school child's health, I would make these suggestions:—

1. Institute a more satisfactory and reliable examination of the school child.
2. See that he has a suitable school meal, and get away from the obsession that every child improves on a glass of cold milk.
3. Reduce home work and abolish entirely examinations which are pitched higher than is necessary, and which eventually lead to pernicious cramming on the one hand and ill-health on the other.—*JAMES BURNET, M.A., LL.B. (LOND.).—Medical World.*

[The above criticism of the education of children and boys in Great Britain can be generally applied to that system in India also; and there is no doubt in that examinations are greatly responsible for much of ill-health and low standard of health of the average boy student. To add to this, the problem of proper nutrition of the school child never engages serious attention of the authorities in India.]—*Ed., Health.*

Nutrition

Improvement of Diet in India

“ONE of the tasks of those who are striving to improve diet in India is to educate the educated,” writes Dr. W. R. Aykroyd, Director of the Nutrition Research Laboratories, Coonoor, in the third edition of Health Bulletin No. 23, entitled “The Nutritive Value of Indian Foods and the Planning of Satisfactory Diets”.

Dr. Aykroyd continues: It is not only the poor, whose choice in the matter of food is extremely limited, who are ignorant and prejudiced about diet and suffer in health because of it. Plenty of people in India and elsewhere who could afford to consume an excellent diet, and feed their children on an excellent diet, do not in fact do so. One can readily find among children of the more prosperous classes cases of serious malnutrition and food deficiency disease.

Those who suffer from under and malnutrition usually cannot afford to purchase a satisfactory diet. Many residential institutions for children in India are very short of money, and have often to feed their boarders on Rs. 3 per head per month, or a good deal less. Now it is difficult, in fact impossible, to supply a really satisfactory diet for such sums.

Value of Milk

BUT even when poverty prevents the purchase of a diet which satisfies modern standards of nutrition, it is often possible to make effective improvements with little increase in cost.

It is desirable that children should consume upwards of 8 ozs. of milk a day—8 ozs. being an amount below that recommended as “optimum” by nutrition workers elsewhere. If available funds do not admit the addition of this quantity of whole milk, butter-milk or skimmed milk reconstituted from skimmed milk powder may be supplied. *Even a little milk is better than none.*

Careful experiments have shown that the giving of 8 ozs of skimmed milk daily to children led on an average “ill-balanced” Indian diet results in an acceleration of growth and a great improvement in health and well-being. Such an addition is not very costly, and is now being supplied in a considerable number of children’s homes in India, to the great benefit of the children.

Calcium is found abundantly in milk (including skimmed milk and butter-milk), cheese and green leafy vegetables, Amaranth, fenugreek and drumstick leaves are rich in calcium. Children need relatively more calcium and other minerals than adults, just as they need relatively more protein. Rice is very deficient in calcium, and there is evidence that insufficiency of calcium is one of the most important defects of the rice eater’s diet.

Parboiled Rice

IF the cereal consumed is milled rice, an improvement in the nutritive value of the diet (and in the health of those consuming it) can be brought about by wholly or partially substituting whole rice, whole wheat or one of the millets, particularly ragi.

If milled rice remains the basis of the diet, it should be realised that the milled rice eater needs more “protective” foods—milk, green vegetables, fruits, etc.—than the consumer of whole wheat or ragi. When the diet is almost wholly composed of rice—when people are so poor that they cannot afford to buy other foods except in minute quantities—then the state in which the rice is eaten becomes of paramount importance. Parboiled rice, even when milled, is superior in nutritive value (particularly as regards the anti-beriberi-vitamin) to raw rice milled to the same degree.

Diets in children’s home and among the general population, are often low in fat. Addition of extra vegetable oil (at the expense of a quantity of cereal supplying an equivalent number of calories) does not greatly increase expenditure. Pure ghee or butter is, of course, preferable to vegetable fat, but very much dearer.

Pulses are rich in protein and in some of the B-vitamins; 2 to 3 ozs. per day increase the nutritive value of a diet largely composed of cereals. However, the pulses in general are less valuable dietary supplements than animal foods such as milk, fish and meat.

Ground Nuts

MORE use could perhaps be made of ground nuts, which are rich in various food-factors, including some of the B-vitamins, a human food. Half to one ounce daily helps to supply some of the elements in which poor rice diets are deficient.

Fruits should always be included in children’s diets. Plantains, a cheap fruit often supplied in hostels, are good food but not of exceptionally high nutritive value. Tomatoes and oranges and other “juicy” fruits are richer in vitamins and make a useful addition to diets of the poorer type.

In Lighter Vein

TUBERCULOSIS was once so poorly understood and so feared that a Congressman introduced a bill to require a tuberculous person to wear a bell or rattle to warn all other people.

Automobile accidents on the streets create a great stir, but tuberculosis causes three times as many deaths.—R. T. Weseman, M. D., Health Off., Kansas City, Kan.—Texas.

IF all the chemical elements composing the average human body were separated and sold at commercial prices, they would fetch about two rupees.